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EXAMINER

COLLINS, GIOVANNA M

ART UNIT PAPER NUMBER

3672

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*HL*

## Office Action Summary

Application No.

10/675,345

Applicant(s)

RICHARD ET AL.

Examiner

Giovanna M. Collins

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 22-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-17 and 19 is/are rejected.
- 7) ☐ Claim(s) 10, 18, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040719, 20030930.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species I- installing flexible tubular string (figs. 1-4)

Species II- installing shape memory tubular (no figs.)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the

Art Unit: 3672

case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Steven Rosenblatt on 9/22/05 a provisional election was made without traverse to prosecute the invention of Species, claims 1-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-28 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Drawings***

The drawings are objected to because Figure 1 is unclear. The specification discloses the reference number 28 is a stress crack but there are no cracks shown in the figure. The specification discloses the reference number 10 is a fiber material but there are no fibers shown in the figure. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Therefore, it is unclear what the applicant means with "creating a reaction with said catalyst from said expanding". The specification disclose the releases the catalyst (page 5, paragraph 0016) but does not discloses the expansion actually creates a reaction with the catalyst.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2,6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Vincent 3,203,483.

Referring to claims 1-2, Vincent discloses (fig. 3) a method of installing a tubular string in a wellbore, comprising: installing the tubular string made of non metallic material (col.12, lines 6-30) into position in the wellbore while the tubular string is in a flexible condition, expanding the tubular string; making the tubular string more rigid (col. 9, lines 25-28).

Referring to claim 3, Vincent discloses storing a catalyst in the wall of the tubular string (col. 12, lines 32-34).

Referring to claim 4, as best understood by the examiner, Vincent discloses creating a reaction with the catalyst the expanding (col. 9, lines 25-28).

Art Unit: 3672

Referring to claim 5, Vincent discloses making the tubular string from a composite epoxy resin and a fiber material (col. 12, lines 12-30).

Referring to claims 8-9, Vincent discloses providing a metallic liner (11) within the tubular string (see fig. 3 , at 11).

Referring to claim 16, Vincent discloses releasing the catalyst independently ( col. 12, lines 24-26) said expanding.

Referring to claim 17, Vincent discloses accomplishing said releasing while expanding (col. 12, lines 24-26, when curing occurs naturally).

5. Claims 1-2,6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Bertet et al. 5,695,008.

Bertet discloses a method of installing a tubular string in a wellbore, comprising: installing the tubular string made of non metallic material (col. 2, lines 34-35) into position in the wellbore while the tubular string is in a flexible condition, expanding the tubular string; making the tubular string more rigid (col. 1, lines 8-20).

Referring to claim 6, Bertet discloses inflating the tubular after positioning to a point short of expansion (fig. 10A).

Referring to claim 8, Bertet disclose providing a liner within the tubular string (see fig. 9 , at 7).

Art Unit: 3672

6. Claims 1-2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Gueguen et al. 5,494,106.

Referring to claims 1-2, Gueguen discloses (figs. 1-2) a method of installing a tubular string in a wellbore, comprising: installing the tubular string made of non metallic material into position in the wellbore while the tubular string is in a flexible condition, expanding the tubular string; making the tubular string more rigid (col. 2, lines 1-21)).

Referring to claim 6, Gueguen discloses inflating the tubular after positioning to a point short of expansion (col. 4, lines 1-10).

7. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Surjaatmadja et al. 6,401,815.

Referring to claims 1-2, Surjaatmadja discloses (figs. 1-2) a method of installing a tubular string in a wellbore, comprising: installing the tubular string made of non metallic material into position in the wellbore while the tubular string is in a flexible condition, expanding the tubular string; making the tubular string more rigid (col. 1, lines 48-63).

8. Claims 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Baugh 6,435,281

Baugh discloses (fig. 5) a method of installing a tubular string in a wellbore, comprising: installing the tubular string (65) into position in the wellbore while the tubular



Art Unit: 3672

string is in a flexible condition, expanding the tubular string (col. 3, line 56-57); making the tubular string more rigid (col. 3, lines 60-61).

Referring to claim 7, Baugh discloses unrolling the tubular string (65) from a coil (Fig. 4b at 6) prior to insertion into the wellbore.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-5, 15-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertet '008 in view of Vincent '483 .

Bertet discloses the method of claim 2 but does not disclose a catalyst for a hardening reaction in the wall of the tubular string. Vincent teaches a catalyst for a hardening reaction in the wall of the tubular string which allows the curing times and pot times to be controlled (col. 12, lines 32-35). As it would be advantageous to be able to control the curing time at various depths, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Bertet to have a catalyst as taught by Vincent..

Referring to claim 4, as best understood by the examiner, Vincent teaches creating a reaction from said expanding (col. 9, lines 25-28).

Referring to claim 5, Bertet discloses the tubular is made from a thermo set resin and a fiber material (col. 2, lines 5-10 and 34-35) but does not disclose the resin is an epoxy resin. Vincent teaches that epoxy resin is a thermo set resin (col. 12, lines 23-28). As it would be advantageous to use epoxy resin since it is a thermo set resin, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Bertet to have a epoxy resin as taught by Vincent.

Referring to claim 15, Bertet discloses performing said expanding without cracking the wall of the tubular string (col. 1, lines 8-20).

Referring to claim 16, Vincent discloses releasing the catalyst independently (col. 12, lines 24-26) said expanding.

Referring to claim 17, Vincent discloses accomplishing said releasing while expanding (col. 12, lines 24-26, when curing occurs naturally).

11. Claims 3,5,15-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gueguen et al. '106 in view of Vincent '483.

Gueguen discloses the method of claim 2 but does not disclose a catalyst for a hardening reaction in the wall of the tubular string. Vincent teaches a catalyst for a hardening reaction in the wall of the tubular string which allows the curing times and pot times to be controlled (col. 12, lines 32-35). As it would be advantageous to be able to change the curing time as needed, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Gueguen to have a catalyst as taught by Vincent.

Referring to claim 5, Gueguen discloses the tubular is made from a thermo set resin and a fiber material (col. 6, lines 8-10 and col. 5, lines 1) but does not disclose the resin is an epoxy resin. Vincent teaches that epoxy resin is a thermo set resin (col. 12, lines 23-28). As it would be advantageous to use epoxy resin since it is a thermo set resin, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Gueguen to have a epoxy resin as taught by Vincent.

Referring to claim 15, Gueguen discloses performing said expanding without cracking the wall of the tubular string (Fig. 2)).

Referring to claim 16, Vincent teaches releasing the catalyst independently ( col. 12, lines 24-26) said expanding.

Referring to claim 17, Vincent teaches accomplishing said releasing while expanding (col. 12, lines 24-26, when curing occurs naturally).

12. Claims 3,5,15-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surjaatmadja et al. '815 in view of Vincent '483.

Surjaatmadja discloses the method of claim 2 but does not disclose a catalyst for a hardening reaction in the wall of the tubular string. Vincent teaches a catalyst for a hardening reaction in the wall of the tubular string which allows the curing times and pot times to be controlled (col. 12, lines 32-35). As it would be advantageous to be able to change the curing time as needed, it would be obvious to one of ordinary skill in the art

Art Unit: 3672

at the time of the invention to modify the method disclosed by Surjaatmadja to have a catalyst as taught by Vincent.

Referring to claim 5, Surjaatmadja discloses the tubular is made from a thermo set resin and a fiber material (col. 3, lines 40-49) but does not disclose the resin is an epoxy resin. Vincent teaches that epoxy resin is a thermo set resin (col. 12, lines 23-28). As it would be advantageous to use epoxy resin since it is a thermo set resin, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Gueguen to have a epoxy resin as taught by Vincent.

Referring to claim 15, Surjaatmadja discloses performing said expanding without cracking the wall of the tubular string (Fig. 2).

Referring to claim 16, Vincent teaches releasing the catalyst independently ( col. 12, lines 24-26) said expanding.

Referring to claim 19, Surjaatmadja, as modified, discloses releasing with electric energy or exposure to a chemical (col. 2, lines 4-7).

13. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertet '008 in view of White 20020111434.

Bertet discloses the method of claim 1 but does not disclose a healing agent. White teaches providing a healing agent for sealing cracks ( page 2, paragraph 0020. White teaches that cracks are often formed in thermosetting polymers (page 1, paragraph 0003). As it would be advantageous to repair any cracks to may form in the thermosetting resin, it would be obvious to one of ordinary skill in the art at the time of

Art Unit: 3672

the invention to modify the method disclosed by Berter to have the healing agent taught by White.

Referring to claims 12-13, White discloses (fig. 1) encapsulating the healing agent and liberating the healing agent as a result of a crack formation where the healing agent is stored.

14. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertet '008 in view of Vincent '483 as applied to claim 3 and further in view of Whit '434.

Bertet, as modified discloses the method of claim 1 but does not disclose a healing agent. White teaches providing a healing agent for sealing cracks ( page 2, paragraph 0020 and liberating the healing agent as a result of a crack formation where the healing agent is stored. White teaches that cracks are often formed in thermosetting polymers (page 1, paragraph 0003). As it would be advantageous to repair any cracks to may form in the thermosetting resin, it would be obvious to one of ordinary skill in the art at the time of the invention to further modify the method disclosed by Bertet to have the healing agent taught by White.

***Allowable Subject Matter***

15. Claims 10,18 and 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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